

Duracordix
Unleashing the Power of Fiber

MARINE & SHIP

PRODUCT BROCHURE

Dedicated to customized high performance synthetic rope solutions for marine & ship. Duracordix makes your work safer, lighter and easier.

BUREAU VERITAS · DNV·GL · CCS · KR KOREAN REGISTER · ClassNK · LR · ABS

www.duracordix.com

Solutions For Marine & Ship

1. Mooring



Solution: Use HMPE rope for its superior strength and durability, ideal for securing large vessels, combined with UV-resistant polyester rope for additional safety and abrasion resistance in sun-exposed docks.

2. Towing



Solution: Employ HMPE rope for high-load towing due to its low elongation and high strength, supplemented by elastic nylon rope to absorb shocks and vibrations in rough sea conditions.

3. Lifting and Hoisting



Solution: Utilize HMPE rope for heavy industrial lifting, offering high strength and efficiency, paired with a polyester and polypropylene mix rope for frequent operations that require durability and ease of handling.

4. Anchoring



Solution: Use HMPE rope for its exceptional tensile strength in securing heavy loads, complemented by polyester rope for abrasion resistance and nylon rope for elasticity to minimize damage during transport.

5. Securing and Lashing



Solution: Combine HMPE rope for its superior strength in large vessel mooring with a polyester and polypropylene mix rope, offering lightweight, durable properties ideal for secure maneuvering and docking operations.

6. Docking Operations

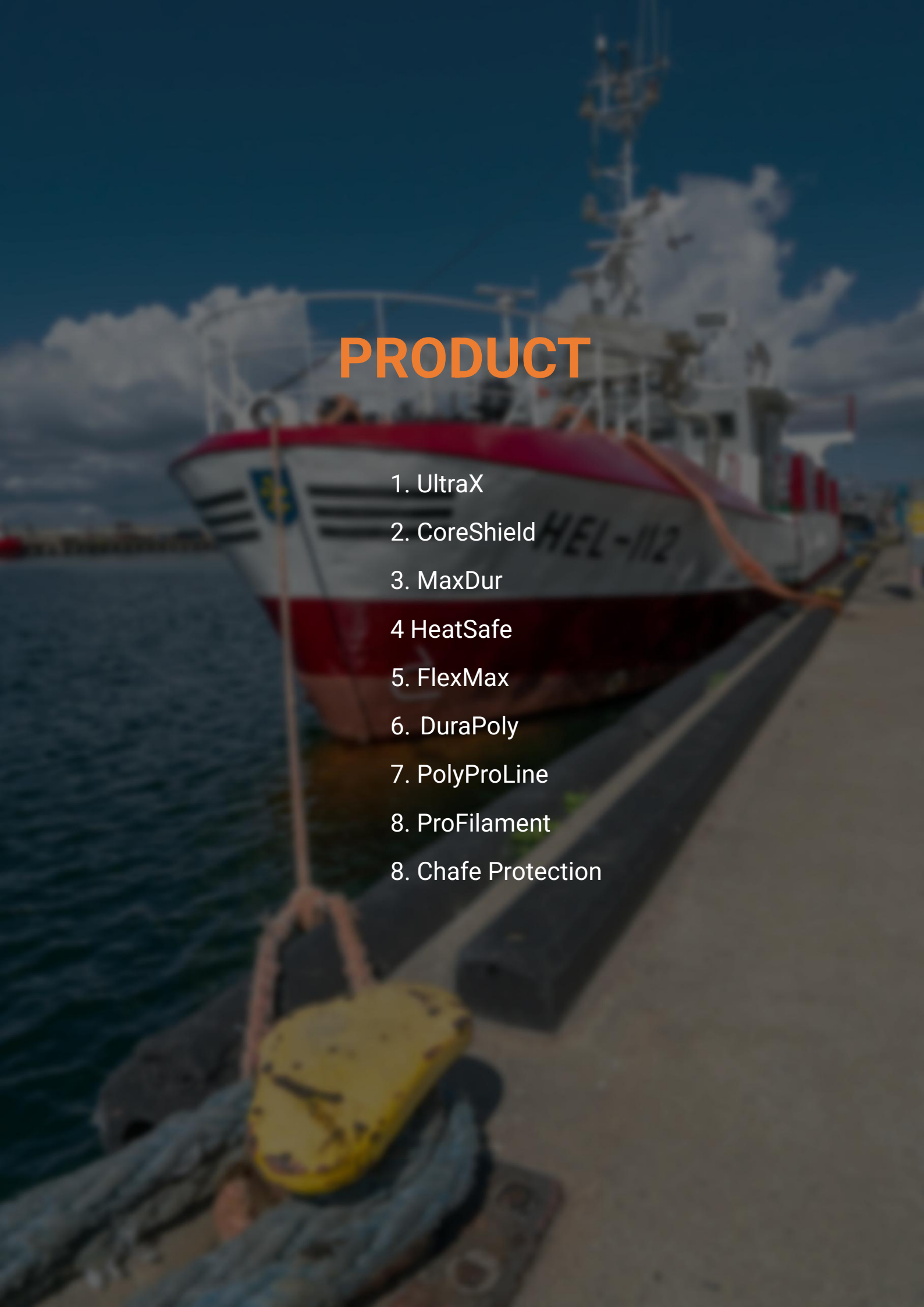


Solution: Combine HMPE rope for its superior strength in large vessel mooring with a polyester and polypropylene mix rope, offering lightweight, durable properties ideal for secure maneuvering and docking operations.

7. Rescue and Safety



Solution: Use HMPE rope for extreme rescue and safety operations, offering high strength and rapid deployment, complemented by polypropylene rope for its excellent buoyancy in lifesaving scenarios.



PRODUCT

1. UltraX
2. CoreShield
3. MaxDur
4 HeatSafe
5. FlexMax
6. DuraPoly
7. PolyProLine
8. ProFilament
8. Chafe Protection

UltraX

Made of Ultra-High-Molecular-Weight Polyethylene, it offers unparalleled strength, durability, and reliability, with a break strength 1.5 times higher and weight around 1/10 of equivalent steel wire ropes, engineered for the toughest marine environments.



Characteristics

Specific Gravity: 0.97g/cm Floating
Melting Point:145°C
Elongation at break:3.5-4%
Water Absorption: None
UV resistance: Good
Abrasion resistance: Good
Chemical corrosion resistance: Super

Structure

8-strand & 12-strand
Single braided

Specification

直径Dia.（mm）	周长Cir（inch）	线密度Ktex（g/m）	破断力KN
4	1/2	10	18
6	3/4	23	33
8	1	39	56
10	1-1/4	61	89
12	1-1/2	87	148
14	1-3/4	117	182
16	2	151	240
18	2-1/4	190	284
20	2-1/2	232	334
22	2-3/4	281	401
24	3	331	473
26	3-1/4	384	540
28	3-1/2	445	610
30	3-3/4	506	690
32	4	575	780
34	4-1/4	648	860
36	4-1/2	720	940
38	4-3/4	798	1040
40	5	881	1130
44	5-1/2	1060	1310
48	6	1250	1530
52	6-1/2	1460	1770
56	7	1690	2030
60	7-1/2	1930	2280
64	8	2200	2560
68	8-1/2	2480	2850
72	9	2780	3170
76	9-1/2	3090	3500
80	10	3430	3870
88	11	4170	4680
96	12	4970	5560
100	12-1/2	5515	6230
104	13	5816	6670
112	14	6780	7770
120	15	7743	8870

Custom diameters and lengths are available.

±5% tolerance according to ISO 2307.

The minimum break load should never be considered the safe working load.

Applications

Marine mooring
Tug Towing
Offshore operations
Docking lines
lifting and rigging Sling
Winch Rope
Fishing Net
Cargo Lashing



CoreShield

Engineered for marine applications, its non-rotative, torque-free construction prevents kinking. The UHMWPE core and polyester cover ensure unmatched strength, durability, and flexibility. Ideal for mooring, towing, and lifting with excellent wear resistance and handling.



Characteristics

Specific Gravity: 0.97~1.09g/cm Floating
Melting Point:260°C 145°C
Elongation at break:3.5-4%
Water Absorption: None
UV resistance: Good
Abrasion resistance: Good
Chemical corrosion resistance: Super

Structure

Jacket: High Tenacity Polyester
Core: 12-Strand HMPE
Double Braided

Specification

直径Dia.(mm)	周长Cir(inch)	线密度Ktex(g/m)	破断力KN
4	1/2	10	18
6	3/4	23	33
8	1	39	56
10	1-1/4	61	89
12	1-1/2	87	148
14	1-3/4	117	182
16	2	151	240
18	2-1/4	190	284
20	2-1/2	232	334
22	2-3/4	281	401
24	3	331	473
26	3-1/4	384	540
28	3-1/2	445	610
30	3-3/4	506	690
32	4	575	780
34	4-1/4	648	860
36	4-1/2	720	940
38	4-3/4	798	1040
40	5	881	1130
44	5-1/2	1060	1310
48	6	1250	1530
52	6-1/2	1460	1770
56	7	1690	2030
60	7-1/2	1930	2280
64	8	2200	2560
68	8-1/2	2480	2850
72	9	2780	3170
76	9-1/2	3090	3500
80	10	3430	3870
88	11	4170	4680
96	12	4970	5560
100	12-1/2	5515	6230
104	13	5816	6670
112	14	6780	7770
120	15	7743	8870

Custom diameters and lengths are available.

±5% tolerance according to ISO 2307.

The minimum break load should never be considered the safe working load.

Applications

Marine Mooring
Tug Towing
Offshore Operations
Docking Lines
Lifting Sling
Winch Rope
General Working Line



MaxDura

MaxDura ropes are designed for ultimate durability and strength. Featuring a double-layered UHMWPE construction, these ropes are perfect for heavy-duty applications where maximum load-bearing capacity and longevity are essential.



Characteristics

Specific Gravity: 0.97g/cm Floating
Melting Point:145°C
Elongation at break:3.5-4%
Water Absorption: None
UV resistance: Good
Abrasion resistance: Good
Chemical corrosion resistance: Super

Structure

Jacket: UHMWPE
Core: 12-strand UHMWPE
Double Braided

Specification

直径Dia.（mm）	周长Cir（inch）	线密度Ktex（g/m）	破断力KN
22	2-3/4	281	401
24	3	331	473
26	3-1/4	384	540
28	3-1/2	445	610
30	3-3/4	506	690
32	4	575	780
34	4-1/4	648	860
36	4-1/2	720	940
38	4-3/4	798	1040
40	5	881	1130
44	5-1/2	1060	1310
48	6	1250	1530
52	6-1/2	1460	1770
56	7	1690	2030
60	7-1/2	1930	2280
64	8	2200	2560
68	8-1/2	2480	2850
72	9	2780	3170
76	9-1/2	3090	3500
80	10	3430	3870
88	11	4170	4680
96	12	4970	5560
100	12-1/2	5515	6230
104	13	5816	6670
112	14	6780	7770
120	15	7743	8870

Applications

Marine mooring
Towing Vessels
Docking lines
Offshore Winching
Cargo Lift
Marine Rigging
Safety Lines



Custom diameters and lengths are available.

±5% tolerance according to ISO 2307.

The minimum break load should never be considered the safe working load.

HeatSaf

Made of para-aramid fibers(Kevlar), engineered for marine applications, our HeatSaf rope offers exceptional strength, durability, and heat resistance. Perfect for mooring, towing, and securing, it ensures reliable performance in the harshest marine environments.



Characteristics

Specific Gravity: 1.44g/cm Floating
Melting Point: 500°C
Elongation at break: 4%
Water Absorption: less 1%
UV resistance: Good
Abrasion resistance: Great
Chemical corrosion resistance: Good

Structure

Jacket: Kevlar fiber
Core: 12-strand Kevlar fiber
Double Braided

Specification

直径Dia.（mm）	周长Cir（inch）	线密度Ktex（g/m）	破断力KN
6	3/4	30	19
8	1	52	34
10	1-1/4	81	55
12	1-1/2	120	75
16	2	210	130
18	2-1/4	265	172
20	2-1/2	328	205
24	3	462	308
28	3-1/2	632	429
32	4	830	539
36	4-1/2	1050	582
40	5	1290	715
44	5-1/2	1570	869
48	6	1860	1030
52	6-1/2	2190	1210
56	7	2540	1410
60	7-1/2	2910	1610
64	8	3310	1830
72	9	4190	2320
80	10	5180	2870
88	11	6270	3470
96	12	7460	4130
104	13	8750	4850

Custom diameters and lengths are available.

±5% tolerance according to ISO 2307.

The minimum break load should never be considered the safe working load.

Applications

Marine mooring
Tug Towing
lifting and rigging Sling
Winch Rope
Safety Line
Fishing Line



FlexMax

Made of durable nylon fiber, FlexMax offers exceptional strength and moderate water absorption. Ideal for marine applications such as mooring, towing, and rigging, it ensures reliable performance and durability in wet conditions.



Characteristics

Specific Gravity: 1.14g/cm Floating
Melting Point:215°C
Elongation at break: 25%
UV resistance: Good
Abrasion resistance: Very Good
Chemical corrosion resistance: Good

Structure

Material: Nylon Fiber
8 Strand & 12 Strand
Single Braided

Specification

八股绳参数 8-Strand Rope Parameter Table				十二股参数 12-Strand Rope Parameter Table			
直径 Dia.（mm）	周长 Cir（inch）	线密度 Ktex（g/m）	破断力 KN	直径 Dia.（mm）	周长 Cir（inch）	线密度 Ktex（g/m）	破断力 KN
24	3	437	90	24	3	437	91
28	3-1/2	594	120	28	3-1/2	594	122
32	4	778	154	32	4	778	157
36	4-1/2	982	190	36	4-1/2	982	194
40	5	1215	235	40	5	1215	240
44	5-1/2	1468	279	44	5-1/2	1468	285
48	6	1750	329	48	6	1750	338
52	6-1/2	2050	384	52	6-1/2	2050	392
56	7	2380	438	56	7	2380	448
60	7-1/2	2730	469	60	7-1/2	2730	499
64	8	3110	568	64	8	3110	579
72	9	3930	707	72	9	3930	721
80	10	4850	867	80	10	4850	884
88	11	5870	1040	88	11	5870	1051
96	12	6990	1230	96	12	6970	1255
104	13	8200	1420	104	13	8200	1448
112	14	9500	1620	112	14	9500	1652
120	15	10900	1865	120	15	10900	1902

Custom diameters and lengths are available.

±5% tolerance according to ISO 2307.

The minimum break load should never be considered the safe working load.

Applications

Marine mooring
Towing Line
Anchoring
Lifeline
Fender Line
Fishing



DuraPoly

Made of high-tensity polyester fiber, DuraPoly offers exceptional strength, fatigue resistance, and durability. Ideal for marine applications such as mooring, towing, and rigging, it ensures reliable performance and longevity in harsh conditions.



Characteristics

Specific Gravity: 1.38g/cm Non-Floating
Melting Point:265°C
Elongation at break: 13%
UV resistance: Good
Abrasion resistance: Very Good
Chemical corrosion resistance: Good

Structure

Material: Polyester Fiber
8 Strand & 12 Strand
Single Braided & Double Braided

Specification

Size 尺寸		Weight 重量	Breaking Strength 破断力	
Dia(mm) 直径	Cir (inch) 圆周	Ktex 线密度	KN 千牛	Ton 公吨
4	1/2	12	2.9	0.30
6	3/4	27	5.6	0.57
8	1	48	10	1.02
10	1-1/4	76	15.6	1.59
12	1-1/2	110	22.3	2.28
14	1-3/4	148	31.2	3.18
16	2	195	39.8	4.06
18	2-1/4	245	49.8	5.08
20	2-1/2	303	62.3	6.36
22	2-3/4	367	74.7	7.62
24	3	437	89.6	9.14
26	3-1/4	512	105	10.71
28	3-1/2	594	120	12.24
30	3-3/4	682	134	13.67
32	4	778	154	15.71
36	4-1/2	982	190	19.39
40	5	1215	235	23.98

Size 尺寸		Weight 重量	Breaking Strength 破断力	
Dia(mm) 直径	Cir (inch) 圆周	Ktex 线密度	KN 千牛	Ton 公吨
40	5	1215	250	25.51
44	5-1/2	1468	295	30.10
48	6	1750	346	35.31
52	6-1/2	2050	405	41.33
56	7	2380	458	46.73
60	7-1/2	2730	512	52.24
64	8	3110	599	61.12
72	9	3930	738	75.31
80	10	4850	889	90.71
88	11	5870	1059	108.06
96	12	6990	1246	127.14
104	13	8200	1439	146.84
112	14	9500	1645	167.86
120	15	10900	1880	191.84
128	16	12400	2129	217.24
136	17	14000	2419	246.84
144	18	15700	2670	272.45
160	20	19400	3290	335.71

Custom diameters and lengths are available.

±5% tolerance according to ISO 2307.

The minimum break load should never be considered the safe working load.

Applications

Marine mooring
Towing Line
Anchoring
Lifeline
Fender Line
Fishing



PolyProLine

Made of Polypropylene , PolyProLine is lightweight, strong, and efficient for vessel operations. It offers excellent wear, chemical, and UV resistance, making it ideal for mooring, towing, marine fishing, and aquaculture.



Characteristics

Specific Gravity: 0.91g/cm Floating
Melting Point: 168°C
Elongation at break: 21%
UV resistance: Normal
Abrasion resistance: Good
Chemical corrosion resistance: Very Good
Wet-dry Strength Ratio: Dry≈Wet

Structure

Material: Polypropylene Fiber
3 Strand, 8 Strand & 12 Strand
Single Braided

Specification

直径Dia.（mm）	周长Cir（inch）	线密度Ktex（g/m）	破断力KN
20	2-1/2	182	57
24	3	259	80
28	3-1/2	355	105
32	4	459	132
36	4-1/2	586	166
40	5	718	201
44	5-1/2	882	242
48	6	1041	280
52	6-1/2	1218	325
56	7	1418	371
60	7-1/2	1631	424
64	8	1850	480
68	8-1/2	2096	542
72	9	2341	603
80	10	2900	741
88	11	3509	890
92	11-1/4	3837	970
96	12	4164	1050
100	12-1/2	4532	1127
104	13	4900	1204
112	14	5700	1390
120	15	6500	1596

Custom diameters and lengths are available.

±5% tolerance according to ISO 2307.

The minimum break load should never be considered the safe working load.

Applications

Marine mooring
Barge Working Line
Towing Line
H-Bitt Working Line
Utility Working Line
Fishing Traps



GripBraid

A durable, high-strength double braided rope combining polyester and polypropylene. Ideal for marine, industrial, and outdoor use, it offers superior grip, flexibility, and resistance to abrasion and UV, ensuring reliable performance in diverse conditions



Characteristics

Specific Gravity: <1 g/cm Floating
Melting Point: 165/260°C
Elongation at break: 17-21%
UV resistance: Good
Abrasion resistance: Good
Chemical corrosion resistance: Very Good

Structure

Material: Polypropylene & Polyester
8 Strand & 12 Strand
Double Braided

Specification

直径Dia.（mm）	周长Cir（inch）	线密度Ktex（g/m）	破断力KN
40	5	902	266
44	5-1/2	1093	324
48	6	1300	380
52	6-1/2	1525	443
56	7	1773	513
60	7-1/2	2035	584
64	8	2310	665
72	9	2924	846
80	10	3610	1036
88	11	4371	1254
96	12	5207	1501
104	13	6112	1758
112	14	7082	2043
120	15	8127	2328

Custom diameters and lengths are available.

±5% tolerance according to ISO 2307.

The minimum break load should never be considered the safe working load.

Applications

Marine mooring
Dock Lines
Towing Rope
Rigging Line
Anchor Line



ProFilament

ProFilamen is a premium-grade polypropylene multifilament rope, engineered for lightweight durability, excellent chemical resistance, and reliable performance across marine, industrial, and utility applications



Characteristics

Specific Gravity: 0.91 (floats on water)
Melting Point: 165°C
Elongation at Break: 15%–18%
UV Resistance: Moderate
Abrasion Resistance: High
Chemical Corrosion Resistance: High

Structure

Material: polypropylene multifilament
3, 8 Strand & 12 Strand
Single Braided

Specification

Size 尺寸		Weight 重量	Breaking Strength 破断力	
Dia(mm) 直径	Cir (inch) 圆周	Ktex 线密度	KN 千牛	Ton 公吨
4	1/2	6.3	2.3	0.23
6	3/4	18	6.5	0.66
8	1	32	11.4	1.16
10	1-1/4	47	16.8	1.71
12	1-1/2	68	23.9	2.43
14	1-3/4	95	32.9	3.35
16	2	121	40.7	4.15
18	2-1/4	155	51.9	5.29
20	2-1/2	189	62.6	6.38
22	2-3/4	231	75.0	7.65
24	3	273	87.7	8.94
26	3-1/4	320	101.0	10.30
28	3-1/2	373	115.0	11.73
30	3-3/4	425	132.0	13.46
32	4	483	146.0	14.89
36	4-1/2	614	182.0	18.57
40	5	756	221.0	22.55

Size 尺寸		Weight 重量	Breaking Strength 破断力	
Dia(mm) 直径	Cir (inch) 圆周	Ktex 线密度	KN 千牛	Ton 公吨
40	5	756	226	23.06
44	5-1/2	924	271	27.65
48	6	1092	315	32.14
52	6-1/2	1281	364	37.14
56	7	1491	416	42.45
60	7-1/2	1712	476	48.57
64	8	1943	539	55.00
72	9	2457	676	68.98
80	10	3045	832	84.90
88	11	3686	998	101.84
96	12	4379	1178	120.20
104	13	5145	1351	137.86
112	14	5985	1560	159.18
120	15	6825	1791	182.76
128	16	7770	2022	206.33
136	17	8820	2276	232.24
144	18	9870	2540	259.18

Custom diameters and lengths are available.

±5% tolerance according to ISO 2307.

The minimum break load should never be considered the safe working load.

Applications

Mooring & Dock
Fishing Netting & Gill Nets
Towing & Anchoring Lines
Aquaculture
Buoy Lines
Sailboat Rigging



Other Products

3 Strand Rope



Polyethylene Tiger Rope



Mooring Tails



Chafe Protection

Chafe protection for marine rope can help prevent wear and abrasion on ropes. Chafe protection can also reduce downtime for ships and protect the environment. Chafe protection can also help prevent frayed fibers from entering the water, which can reduce marine pollution.



Advantages

Enhanced Safety: Chafe protection ensures strengthened ropes, preventing potential breaks and enhancing overall safety for sails, equipment, and the boat.

Cost Savings: By minimizing rope damage, chafe protection reduces the need for costly replacements, resulting in significant savings in repair and maintenance expenses.

Optimized Performance: Chafe protection preserves the strength and flexibility of ropes, optimizing their performance and effectiveness in fulfilling their intended purposes.

Main Types

01 Tubular Sleeve



Crafted from high-tenacity polyester fibers, this woven marvel forms a durable, abrasion-resistant shield around your ropes, keeping them safe from the harsh realities of nautical life,

02 PR Wear Protection



Crafted from high-tenacity polyester fibers, built in a layered design. Thicke than regular tubular sleeve and removable and easy to handle

03 Dura Cage



It seamlessly integrates the lightweight, abrasion-resistant, and non-water-absorbing attributes of UHMWPE fiber within its braided cover sleeve.

04 DB Wear Protection

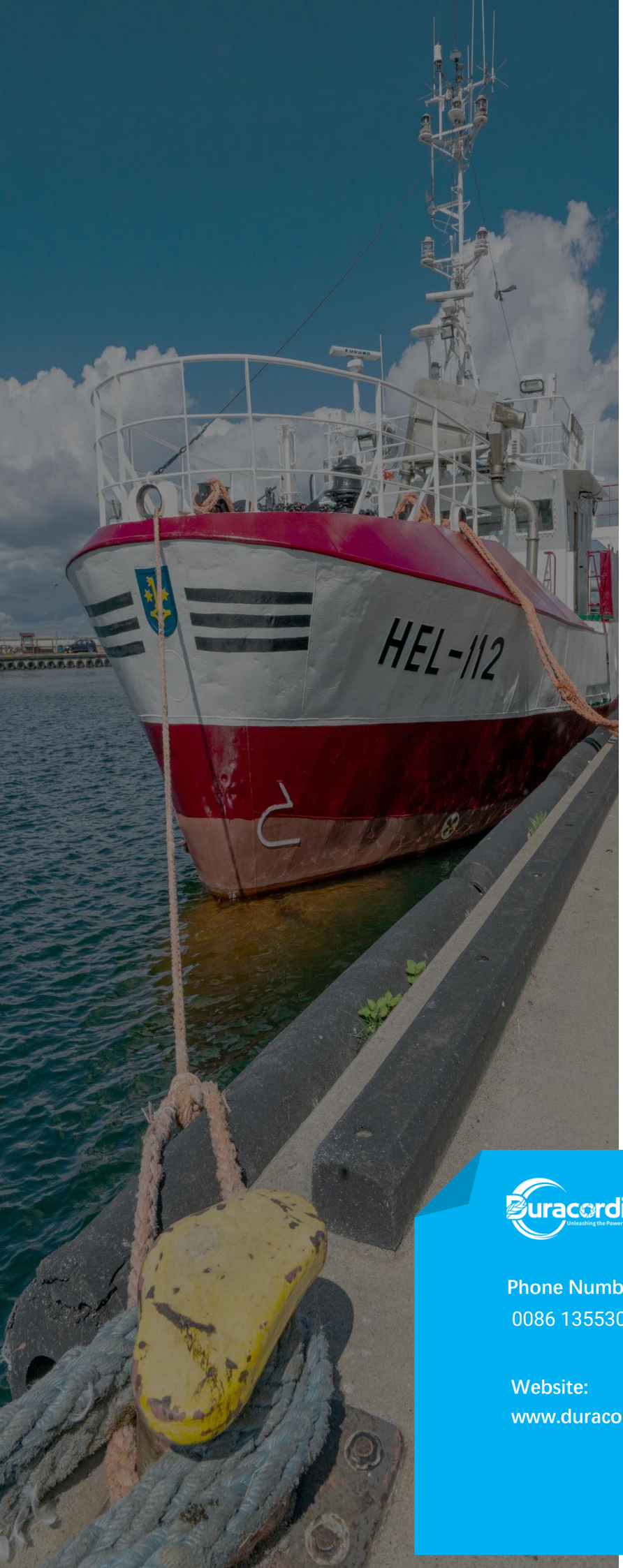


This is a tightly braided tubular polyester chafe sleeve with proprietary marine polyurethane coating for use in extreme applications.

05 PT Wear Protection



Densely braided polyester chafe sleeve, coated with marine-grade polyurethane, designed for extreme chafe resistance. Offers robust protection, slightly less flexible.



Duracordix
Unleashing the Power of Fiber

NOW

Experience
the Duracordix Difference

Don't just meet industry standards; redefine them.

Reach out to Duracordix today to discover products that intertwine quality with reliability, ensuring your project stands the test of time.

Duracordix
Unleashing the Power of Fiber

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